

AMENDMENT TO THE CLAIMS

1. (Original) An imaging apparatus, comprising:

a media support surface, and a first normal line extending perpendicular to a plane of said media support surface;

5 a light source positioned at a first angle with respect to said first normal line, said light source producing a light beam;

a light detector positioned at a second angle with respect to said first normal line, said light source and said light detector being positioned on opposite sides of said first normal line, said light detector providing an output;

10 a reflective surface formed near said media support surface, and a second normal line extending perpendicular to said reflective surface, said first normal line and said second normal line being non-parallel, said reflective surface being formed at a third angle with respect to said plane of said media support surface,

said light source and said light detector being positioned in relation to said reflective surface such that when a sheet of print media covers said reflective surface, a reflected specular light component of said light beam is received by said light detector, and when said reflective surface is not covered, said reflective surface directs the reflected specular light component of said light beam away from said light detector, said output of said light detector providing an indication of a presence or an absence of said sheet of print media,

20 wherein a signal strength of said output from said light detector when receiving a diffuse light component reflected from said reflective surface is less than the signal strength of said output from said light detector when receiving the reflected specular light component that is reflected from a low reflectance print media.

2. (Original) The apparatus of claim 1, further comprising a controller communicatively coupled to said light detector to receive said output of said light detector.

3. (Original) The apparatus of claim 1, said low reflectance print media having a diffuse finish.

4. (Original) The apparatus of claim 1, said first angle and said second angle being substantially equal.

5. (Original) A method of detecting the presence or absence of a sheet of print media, comprising:

providing a media support surface, and a first normal line extending perpendicular to a plane of said media support surface;

5 providing a light source positioned at a first angle with respect to said first normal line, said light source producing a light beam;

providing a light detector positioned at a second angle with respect to said first normal line, said light source and said light detector being positioned on opposite sides of said first normal line, said light detector providing an output;

10 providing a reflective surface formed near said media support surface, and a second normal line extending perpendicular to said reflective surface, said first normal line and said second normal line being non-parallel, said reflective surface being formed at a third angle with respect to said plane of said media support surface;

positioning said light source and said light detector in relation to said reflective surface
15 such that when said sheet of print media covers said reflective surface, a reflected specular light component of said light beam is received by said light detector, and when said reflective surface is not covered, said reflective surface directs the reflected specular light component of said light beam away from said light detector, said output of said light detector providing an indication of a presence or an absence of said sheet of print media; and

20 determining a signal strength of said output from said light detector, wherein the signal strength of said output from said light detector when receiving a diffuse light component reflected from said reflective surface is less than the signal strength of said output from said light detector when receiving the reflected specular light component that is reflected from a low reflectance print media.

6. (Original) The method of claim 5, said determining step being performed by a controller communicatively coupled to said light detector.

7. (Original) The method of claim 5, said low reflectance print media having a diffuse finish.

8. (Original) The method of claim 5, said first angle and said second angle being substantially equal.

9. (Original) A media sensing apparatus, comprising:

a media support surface, and a first normal line extending perpendicular to a plane of said media support surface;

5 a light source positioned at a first angle with respect to said first normal line, said light source producing a light beam;

a light detector positioned at a second angle with respect to said first normal line, said light source and said light detector being positioned on opposite sides of said first normal line, said light detector providing an output;

10 a reflective surface formed near said media support surface, and a second normal line extending perpendicular to said reflective surface, said first normal line and said second normal line being non-parallel, said reflective surface being formed at a third angle with respect to said plane of said media support surface,

15 said light source and said light detector being positioned in relation to said reflective surface such that when a sheet of print media covers said reflective surface, a reflected specular light component of said light beam is received by said light detector, and when said reflective surface is not covered, said reflective surface directs the reflected specular light component of said light beam away from said light detector, said output of said light detector providing an indication of a presence or an absence of said sheet of print media,

20 wherein a signal strength of said output from said light detector when receiving a diffuse light component reflected from said reflective surface is less than the signal strength of said output from said light detector when receiving the reflected specular light component that is reflected from a low reflectance print media.

10. (Original) The apparatus of claim 9, further comprising a controller communicatively coupled to said light detector to receive said output of said light detector.

11. (Original) The apparatus of claim 9, said low reflectance print media having a diffuse finish.

12. (Original) The apparatus of claim 9, said first angle and said second angle being substantially equal.

13. (Original) A media sensing apparatus, comprising:

a reflective surface having a normal line extending perpendicular to said reflective surface;

and

5 a media sensor having a centerline, said media sensor including a light source and a light detector, said light source and said light detector being positioned on opposite sides of said centerline, said light source producing a light beam, said light detector providing an output, said light source and said light detector being positioned with respect to said reflective surface; and

10 a controller communicatively coupled to said light detector to receive said output of said light detector, said controller determining a signal strength of said output from said light detector, wherein the signal strength of said output from said light detector when receiving a diffuse light component reflected from said reflective surface is less than the signal strength of said output from said light detector when receiving a reflected specular light component that is reflected from a low reflectance print media, said controller determining a presence or an absence of a sheet of print media based on said signal strength of said output from said light detector.

14. (Original) The apparatus of claim 13, said media sensor being positioned with respect to said reflecting surface such that said normal line of said reflecting surface intersects a region between said light source and said light detector.

15. (Original) The apparatus of claim 13, further comprising a media support surface, said reflective surface being positioned along said media support surface, said reflective surface being formed at an angle with respect to said media support surface.

16. (Original) The apparatus of claim 13, wherein when said sheet of print media covers said reflective surface, said reflected specular light component of said light beam is received by said light detector, and when said reflective surface is not covered, said reflective surface directs said reflected specular light component of said light beam away from said light detector, said
5 output of said light detector providing an indication of said presence or said absence of said sheet of print media.

17. (Original) The apparatus of claim 13, said low reflectance print media having a diffuse finish.

18. (Original) The apparatus of claim 13, said light detector being the sole light detector in said media sensor.